UNIVERSITÀ DEGLI STUDI DI MILANO
FACOLTÀ DI SCIENZE AGRARIE E ALIMENTARI

Codice	Denominazione insegnamento	CFU	A.A.
K0705-	**Advanced microeconomics**	**8**	**1**

Docente
Franco Donzelli

Obiettivi formativi
The course is designed to provide a rigorous introduction to the conceptual apparatus of modern microeconomics. Its objective is to equip first-year students with the basic analytical tools required to read and understand contemporary literature in theoretical and applied microeconomics and possibly to approach more advanced research topics in this area.

Competenze acquisite
By attending this course, the students: 1) will obtain a thorough knowledge of the foundations of modern microeconomic analysis; 2) will learn how to interpret and explain a number of economic phenomena central to contemporary market economies; 3) will acquire advanced skills enabling them to apply the relevant methodology, analytical tools, and theoretical apparatus of modern microeconomics to the solution of a number of economic problems (concerning consumers' and producers' choices, price formation, economic efficiency, and social welfare).

Sintesi del programma
The focus of the course is chiefly theoretical. The course will start from individual decision making: after reviewing consumer and producer choice theory, the course will develop classical demand and production theory in a market economy. Then, after introducing the notions of competitive equilibrium and Pareto efficiency and illustrating them with reference to a few specific examples, the course will examine the workings of a generalized multi-market competitive economy, thereby developing the foundations of Walrasian general equilibrium theory and welfare economics. Finally, the course will apply microeconomic analysis to welfare evaluation and market failure problems, examining in particular the economic effects of both the existence of externalities and the provision of public goods, under competitive and non-competitive conditions.

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Programma

Unit 1 – Consumers and producers

1. Individual decision making: An introduction
 - Market economies: commodities and prices
2.   Consumer choice theory
 - Preferences and utility
 - Utility maximization and expenditure minimization
3. Demand theory
 - Individual demand functions: Walrasian and Hicksian
 - The Slutsky equation: wealth and substitution effects
  - Aggregation
4. Producer choice theory
 - Technology: production sets, transformation functions, production functions
 - Profit maximization and cost minimization
5. Supply theory
 - Individual supply functions
 Cost and supply in the single-output case
 - Aggregation

Unit 2 – Competitive equilibrium and Pareto optimality

6. Competitive equilibrium and Pareto optimality: An introduction
7. General equilibrium theory: some examples
 - The Edgeworth Box economy
 - The Robinson Crusoe economy
8. General equilibrium of a market economy with excess demand functions
9. General equilibrium theory and welfare economics
 - The two Fundamental Theorems of Welfare Economics
 - Pareto optimality and social welfare optima
10. First-order conditions for equilibrium and optimality

Unit 3 – Some applications: welfare evaluation, market failures, market power

11. Welfare evaluation in the partial equilibrium model
12. Externalities
13. Public goods
14. Second-best solutions
15. Monopoly pricing

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Articolazione dei CFU

Lez. frontali	Esercitaz. in aula	Esercitaz. in lab.	Laboratorio	Seminari	Altro
6	2				

Prerequisiti

The students are expected to fully master the topics dealt with in the course Mathematics for Economics (6 credits), i.e., linear algebra, intermediate calculus, and an introduction to static optimization. A reasonable acquaintance with introductory and intermediate microeconomics (consumer and producer theory, partial competitive equilibrium theory) is expected.

Propedeuticità

Info non disponibile

Materiale didattico

Mas-Colell A., M.D. Whinston and J.R. Green, Microeconomic Theory, Oxford University Press, Oxford, 1995. Chapters 1.A-B; 2; 3.A-E, G, and I; 4.A-B; 5; 10; 11; 12.A-B; 15; 16.A-F; Mathematical Appendix: M.A-M.F., M.J-M.L.

Varian Hal. R., Microeconomic Analysis, Third Edition, W. W. Norton & Company, New York – London, 1992. Chapters 1-5, 7-10, 13-14, 17-18.

Modalità d'esame e altre informazioni

A number of problem sets, both unmarked (UPS) and marked (MPS), will be handed out over the entire duration of the course. All problem sets will be discussed in specific class meetings. Three problem sets will be marked. Students will be required to hand in the solutions to each marked problem set in the week immediately following its distribution. The overall assessment will be based on the successful solution of all the problem sets (30% of the final grade) and a written final examination (70% of the final grade).

Regular attendance is encouraged. Two bonus points will be granted to students attending more than 80% of the course lectures and classes. One bonus point will be granted to students attending more than 50%, but less than 80%, of the course lectures and classes. No bonus will be given to students attending less than 50% of the course lectures and classes.